Amendments to the Claims:

Please cancel claim 18 without prejudice as shown in the following listing of claims:

Listing of Claims:

1. (Previously presented) A method of reducing the viability of a tumor cell, comprising administering to the tumor cell a virus, wherein said virus is a vesicular stomatitis virus and said tumor cell is a hematopoietic tumor cell.

2. (Withdrawn) The method of claim 1, wherein the tumor cell is selected from the group consisting of ovarian carcinoma, leukaemia, lung carcinoma, and colon carcinoma.

3. (Withdrawn) The method of claim 1, wherein the tumor cell is a carcinoma.

4. (Withdrawn) The method of claim 3, wherein the carcinoma is a lung carcinoma.

5. (Original) The method of claim 1, wherein the tumor cell is a hematopoietic cancer cell.

6. (Original) The method of claim 5, wherein the hematopoietic cancer cell is a leukemia, a lymphoma, or a myeloma.

7. (Original) The method of claim 6, wherein the hematopoietic cancer cell is a leukemia.

8. (Original) The method of claim 7, wherein the leukemia is acute myelogenous leukemia.

9. (Original) The method of claim 7, wherein the leukemia is chronic myelogenous leukemia.

10. (Original) The method of claim 7, wherein the leukemia is promyelocytic leukemia.

11. (Original) The method of claim 7, wherein the leukemia is T cell leukemia.

12. (Original) The method of claim 6, wherein the hematopoietic cancer cell is a lymphoma.

13. (Original) The method of claim 6, wherein the hematopoietic cancer cell is a myeloma.

14. (Withdrawn) The method of claim 1, wherein the tumor cell is a sarcoma.

15. (Withdrawn) The method of claim 14, wherein the sarcoma is an osteosarcoma.

16. (Withdrawn) The method of claim 14, wherein the sarcoma is a fibrosarcoma.

17. (Withdrawn) The method of claim 1, wherein the tumor cell is a neuroendocrine tumor.

Claim 18 (cancelled).

19. (Original) The method of claim 1, wherein the tumor cell is PKR-/-; STAT1-/-; or both PKR-/- and STAT1-/-.

Claims 20-23 (cancelled).

24. (Previously presented) The method of claim 7, further comprising administering interferon to the tumor cell prior to administering VSV.

25. (Previously presented) The method of claim 5, wherein the virus is unable to inactivate PKR activity within the tumor cell.

26. (Previously presented) The method of claim 5, wherein the virus is an attenuated strain of vesicular stomatitis virus.

27. (Original) The method of claim 26, wherein the virus is vesicular stomatitis virus strain M1.

28. (Original) The method of claim 26, wherein the virus is vesicular stomatitis virus strain M2.

29. (Original) The method of claim 26, wherein the virus is vesicular stomatitis virus strain M3.

30. (Original) The method of claim 26, wherein the virus is vesicular stomatitis virus strain M4.

31. (Original) The method of claim 26, wherein the virus is vesicular stomatitis virus strain M5.

32. (Original) The method of claim 1, wherein the tumor cell is in a mammalian subject and the virus is administered to the tumor cell by intravenous, intranasal, intraperitoneal or intratumoral administration to the subject.

33. (Original) The method of claim 32, wherein the mammalian subject is a human or a non-human mammal.

34. (Previously presented) The method of claim 32, wherein the virus is contained in cell line infected with the virus and the administration comprises administering the virus-infected cell line to the subject by a route selected from intratumorally, intravenously and intraperitoneally.

35. (Original) A method of reducing the viability of a tumor cell within a population of tumor cells and non-tumor cells comprising administering a vesicular stomatitis virus to the population of cells, wherein the virus is able to selectively infect and kill the tumor cell.

36. (Original) The method of claim 35, wherein the virus is unable to inactivate PKR activity in the tumor cell.

37. (Original) The method of claim 36, further comprising treating the population of cells with interferon prior to administering the virus.

38. (Withdrawn) A method for identifying a tumor susceptible to treatment with a virus, comprising:

(a) dividing a sample containing cells of the tumor into a first portion and a second portion;

(b) treating the first portion with the virus; and

(c) determining whether the percentage of dead cells in the first portion is higher than in the second portion,

wherein the tumor is susceptible to treatment with the virus if the percentage of dead cells in the first portion is higher than in the second portion.

39. (Withdrawn) The method of claim 38 wherein the virus is a Rhabdovirus.

40. (Withdrawn) The method of claim 39 wherein the virus is a vesicular stomatitis virus.

41. (Withdrawn) The method of claim 38 wherein the percentage of dead cells is determined utilizing flow cytometry.

42. (Withdrawn) The method of claim 38 wherein the tumor is a solid tumor and the sample is obtained from a subject by biopsy.

43. (Withdrawn) The method of claim 42, further comprising prior to step (b) treating the tumor sample to disaggregate the cells.

44. (Withdrawn) The method of claim 38 wherein the tumor is a leukemia and the sample is obtained by isolating white blood cells from a blood sample to obtain the tumor cell-containing sample.

45. (Withdrawn) A method for identifying a tumor susceptible to treatment with a virus, comprising:

(a) dividing a sample containing cells of the tumor into a first portion and a second portion;

(b) treating the first portion with the virus and an amount of interferon sufficient to improve survival of interferon-responsive cells in the presence of the virus, and treating the second portion with the virus in the absence of interferon; and

(c) determining whether the percentage of dead cells in the first portion is higher than in the second portion,

wherein the tumor is susceptible to treatment with the virus if the percentage of dead cells in the first portion is higher than in the second portion.

46. (Withdrawn) The method of claim 45 wherein the virus is a Rhabdovirus.

47. (Withdrawn) The method of claim 46 wherein the virus is a vesicular stomatitis virus.

48. (Withdrawn) The method of claim 45 wherein the percentage of dead cells is determined utilizing flow cytometry.

49. (Withdrawn) The method of claim 45 wherein the tumor is a solid tumor and the sample is obtained from a subject by biopsy.

50. (Withdrawn) The method of claim 49, further comprising prior to step (b) treating the tumor sample to disaggregate the cells.

51. (Withdrawn) The method of claim 45 wherein the tumor is a leukemia and the sample is obtained by isolating white blood cells from a blood sample to obtain the tumor cell-containing sample.

52. (Withdrawn) A method for purifying a vesicular stomatitis virus, comprising adding a sample containing the virus to an affinity matrix to produce the virus bound to the affinity matrix; washing the bound virus; and eluting the bound virus from the affinity matrix.

53. (Withdrawn) The method of claim 52, wherein the affinity matrix is directed to a protein expressed on the envelope of VSV.

54. (Withdrawn) The method of claim 53, wherein the protein expressed on the envelope of VSV is a chimeric protein.

55. (Withdrawn) The method of claim 53, wherein the chimeric protein comprises a histidine tag, and the affinity matrix is a nickel resin.

56. (Withdrawn) A modified vesicular stomatitis virus expressing a non-native protein on its surface.

57. (Withdrawn) The modified virus of claim 56, wherein the non-native protein is a fusion protein comprising an affinity tag and a viral envelope protein.

58. (Withdrawn) The modified virus of claim 56, wherein the non-native protein is derived from a producer cell.

59. (Withdrawn) An isolated nucleic acid molecule having a sequence comprising:

(a) a sequence coding for a protein comprising the amino acid sequence of Protein N of a VSV strain selected from the group consisting of HR and M3 shown in Figure 15; or

(b) N gene cDNA sequence of a VSV strain selected from the group consisting of HR, M2 and M3 shown in Figure 14; or

(c) RNA sequence corresponding to (b); or

(d) a sequence complementary to (a), (b) or (c).

60. (Withdrawn) An isolated nucleic acid molecule having a sequence comprising:

(a) a sequence coding for a protein comprising the amino acid sequence of Protein P of a VSV strain selected from the group consisting of HR, M3 and M4 shown in Figure 17; or

(b) P gene cDNA sequence of a VSV strain selected from the group consisting of HR, M3 and M4 shown in Figure 16; or

(c) RNA sequence corresponding to (b); or

(d) a sequence complementary to (a), (b) or (c).

61. (Withdrawn) An isolated nucleic acid molecule having a sequence comprising:

(a) a sequence coding for a protein comprising the amino acid sequence of Protein M of a VSV strain selected from the group consisting of HR, M3 and M4 shown in Figure 19; or

(b) M gene cDNA sequence of a VSV strain selected from the group consisting of HR, M3 and M4 shown in Figure 18; or

(c) RNA sequence corresponding to (b); or

(d) a sequence complementary to (a), (b) or (c).

62. (Withdrawn) An isolated nucleic acid molecule having a sequence comprising:

(a) a sequence coding for a protein comprising the amino acid sequence of Protein G of VSV strain M3 shown in Figure 21; or

(b) G gene cDNA sequence of VSV strain M3 shown in Figure 20; or

(c) RNA sequence corresponding to (b); or

(d) a sequence complementary to (a), (b) or (c).

63. (Withdrawn) An isolated nucleic acid molecule having a sequence comprising:

(a) a sequence coding for a protein comprising the amino acid sequence of Protein L of VSV strain M4 shown in Figure 23; or

(b) L gene cDNA sequence of VSV strain M4 shown in Figure 16; or

(c) RNA sequence corresponding to (b); or

(d) a sequence complementary to (a), (b) or (c).